

ABSTRACT OF THE DISCLOSURE

A turbine fuel ring assembly includes a fuel distribution ring, at least one fuel supply tube attached to the fuel distribution ring and at least one attachment leg connected to the fuel distribution ring. The fuel ring has a hollow interior and a plurality of apertures for expelling a fluid. The attachment leg is configured to allow flexibility due to thermal expansion induced under certain load conditions such as during engine start-up or shut-down. Further, the configuration of the attachment legs provides improved stress distribution characteristics. The fuel supply tube includes a rectangular passage and a round passage that are disposed substantially transverse to each other and in fluid communication with each other and with the hollow interior of the fuel distribution ring. The rectangular passage and the round passage have substantially identical cross-sectional areas. The fuel supply tube is configured to avoid structural interferences with neighboring components.